AMENDMENTS TO THE CLAIMS

Please amend the claims as set forth in the following listing of claims, which replaces all prior versions and listings of the claims.

1. (Currently Amended) A method of manufacturing fine particles, comprising the steps of:

supplying reactants into a flame produced by a burner;

generating particle nuclei by reactions of the reactants in the flame;

forming aggregates including said particle nuclei by a collision and combination of said particle nuclei with each other in said flame;

irradiating at least one laser beam into said aggregates with a power level of the laser beam sufficient to cause said aggregates to coalesce and convert said aggregates into smaller fine, substantially spherical particles; and

~~selecting a power level of said at least one laser beam sufficient to cause said aggregates to coalesce and convert said aggregates into smaller fine, substantially spherical particles~~;

wherein said laser beam is irradiated into the flame in a direction perpendicular to a direction in which said fine particles move.

2-9. (Canceled)

10. (Previously Presented) The method according to claim 1, wherein collision cross sections of said aggregates are greater than collision cross sections of the fine particles produced from said aggregates.

11. (Currently Amended) The method according to claim 1, further comprising a step of setting the power level of said laser corresponding to ~~controlling~~ a phase of the fine particles thereby controlling the phase of the fine particles ~~said power level of the laser beam~~.

12. (Currently Amended) A method of manufacturing nanoparticles comprising:

supplying reactants into a flame produced by a burner;

generating particle nuclei by reactions of the reactants in the flame;

forming aggregates including pluralities of said particle nuclei by collision and combination of said pluralities of said particle nuclei with each other in said flame;

~~and~~ irradiating at least one laser beam onto said aggregates in the flame at a position below the top of the flame; and

~~selecting~~ adjusting a power level of said at least one laser beam sufficient to cause said aggregates to coalesce and convert into smaller fine, substantially spherical particles.

13. (Previously Presented) The method according to Claim 12 additionally comprising collecting the fine spherical particles onto a member above the flame.

14. (Previously Presented) The method according to Claim 13, wherein the step of irradiating comprises directing the laser such that the laser beam does not intersect a position at which said fine spherical particles collect on the member.

15-16. (Canceled)

17. (Currently Amended) The method according to Claim 11, additionally comprising ~~selecting~~ setting the power level such that the temperature of the fine particles does not reach their melting point.

18. (Currently Amended) The method according to Claim 11, additionally comprising ~~selecting~~ setting the power level such that it is sufficient to raise the temperature of the fine particles above their melting point.

19. (Currently Amended) The method according to Claim 12, additionally comprising ~~selecting~~ setting the power level such that the temperature of the fine spherical particles does not reach their melting point.

20. (Currently Amended) The method according to Claim 12, additionally comprising ~~selecting~~ setting the power level such that it is sufficient to raise the temperature of the fine spherical particles above their melting point.

21. (Currently Amended) A method of manufacturing fine particles, comprising the steps of:

supplying reactants at a flow rate into a flame produced by a burner such that particle nuclei are generated by reactions of the reactants in the flame and aggregates are formed;

irradiating at least one laser beam into said aggregates in the flame at a power level sufficient for said aggregates to coalesce and convert into smaller fine particles; and

~~selecting~~ positioning said at least one laser beam to irradiate into the flame at a distance from said burner ~~that said at least one laser beam is irradiated into the flame~~, wherein said distance has a positive correlation to said flow rate.

22. (Currently Amended) A method of manufacturing fine particles, comprising the steps of:

supplying reactants into a flame produced by a burner such that particle nuclei are generated by reactions of the reactants in the flame and aggregates are formed;

directing a laser beam ~~at a power level sufficient for said aggregates to coalesce and convert into smaller fine particles~~ for a first pass through the flame at a first distance from said burner; and

redirecting said laser beam for a second pass through the flame at a second distance from said ~~burner~~ burner;

wherein a power level of said laser beam is sufficient for said aggregates to coalesce and convert into smaller fine particles as a result of the combined passes of the laser beam through the flame.

23. (Previously Presented) The method of Claim 22, additionally comprising selecting said second distance to be further from the burner than said first distance.